

AMENDMENTS TO THE CLAIMS

1. (Original) A process for recovering 3-aminomethyl-3,5,5-trimethylcyclohexylamine (isophoronediamine, IPDA) having a cis/trans isomer ratio of at least 73/27 by fractional distillation, which comprises the following steps:

- a. providing IPDA in a cis/trans isomer ratio of $< 73/27$;
- b. feeding IPDA into the middle region of a distillation column having internals and distilling the IPDA in this distillation column at a temperature of from 5 to 300°C and a pressure of from 10 to 2000 mbar;
- c. optionally further purifying the IPDA obtained by step b) by distilling in at least one further column;

where steps b) and c) separate the IPDA used in step a) into at least five fractions ia) to iv):

- ia) the organic proportion of a fraction of impurities having lower boiling points than trans-IPDA,
- ib) the aqueous proportion of a fraction of impurities having lower boiling points than trans-IPDA,
- ii) a fraction of impurities having higher boiling points than cis-IPDA,
- iii) an IPDA fraction having a cis/trans isomer ratio of $\geq 73/27$ and
- iv) an IPDA fraction having a cis/trans isomer ratio of $\leq 66/34$.

2. (Original) A process as claimed in claim 1, wherein the proportion of cis- and trans-IPDA in the fraction ib) obtained by steps b) and c) is $\leq 2\%$ weight, based on the total weight of fraction ib).
3. (Currently amended) A process as claimed in claim 1 ~~claim 1 or 2~~, wherein IPDA is used in step a) which has a cis/trans isomer ratio of $< 70/30$.
4. (Currently amended) A process as claimed in ~~any of claims 1 to 3~~ claim 1, wherein the distillation column used in step b) has a separating performance of at least 20 theoretical plates.
5. (Currently amended) A process as claimed in ~~any of claims 1 to 4~~ claim 1, wherein, when one or two columns are used, at least one column is a dividing wall column.
6. (Currently amended) A process as claimed in ~~any of claims 1 to 5~~ claim 1, wherein two columns are used, of which one is a dividing wall column.
7. (Currently amended) A process as claimed in ~~any of claims 1 to 4~~ claim 1, wherein two columns are used and one of the fractions iii) or iv) is removed at a sidestream takeoff.
8. (Currently amended) A process as claimed in ~~any of claims 1 to 4~~ claim 1, wherein three conventional distillation columns are connected to one another.
9. (Currently amended) A process as claimed in ~~any of claims 1 to 8~~ claim 1, wherein the internals in the ~~column/s~~ column or columns used in steps b) and/or c) are selected from the group of random packings, sheet metal structured packings and woven metal structured packings.